

**Notice of Allowability**

Application No.

09/820,149

Examiner

Michelle Crowell

Applicant(s)

YUDA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to June 14, 2004.
2. ☒ The allowed claim(s) is/are 1, 5-10, 17-22, 29-34 and 41-48.
3. ☒ The drawings filed on 28 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**GREGORY MILLS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1700**

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Norman Soloway on September 7, 2004.

2. The application has been amended as follows:

In line 11 of claim 1, after "through", inserted --and each of which has a diameter not larger than three millimeters--;

In line 2 of claim 8, before "inner", inserted --an--;

On page 12, line 1 of claim 20, before "inner", inserted --an--;

In line 2 of claim 32, before "inner", inserted --an--;

In line 2 of claim 44, before "inner", inserted --an--;

In line 12 of claim 47, after "through", inserted --and each of which has a diameter not larger than three millimeters--;

In line 13 of claim 47, after "percent", inserted --, so as to avoid diffusion of the second gas from the processing region to the plasma generation region and as a result, to suppress backward flow of the second gas into the plasma generation region--;

In line 13 of claim 48, after “through”, inserted –and each of which has a diameter not larger than three millimeters--;

In line 17 of claim 48, after “percent”, inserted –, so as to avoid diffusion of the second gas from the processing region to the plasma generation region and as a result, to suppress backward flow of the second gas into the plasma generation region--.

3. Claims 2-4, 11-16, 23-28, 35-40, and 49-51 are cancelled.

4. Claims 1, 5-10, 17-22, 29-34, and 41-48 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art, either singly or in combinations, fails to anticipate or render obvious a remote plasma apparatus comprising: a cavity having first inlet that communicates with a plasma generation region and second inlet that communicates with a processing region; an energy source arranged and adapted to apply energy within the plasma generation region to generate, from the first gas, plasma including radicals; a plate arranged in the cavity and dividing the cavity between the plasma generation region and the processing region, **the plate being formed with a plurality of perforated holes which the radicals pass through and each of**

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**which has a diameter not larger than three millimeters, wherein aperture ratio of the perforated holes area to the plate is not greater than five percent, so as to avoid diffusion of the second gas from the processing region to the plasma generation region and as a result to suppress backward flow of the second gas into said plasma generation region; and a substrate supporter arranged within the processing region.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Crowell whose telephone number is (571) 272-1432. The examiner can normally be reached on M-F (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on (571) 272-1439. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMC *ane*

  
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